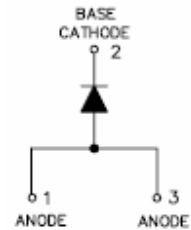


### Features:

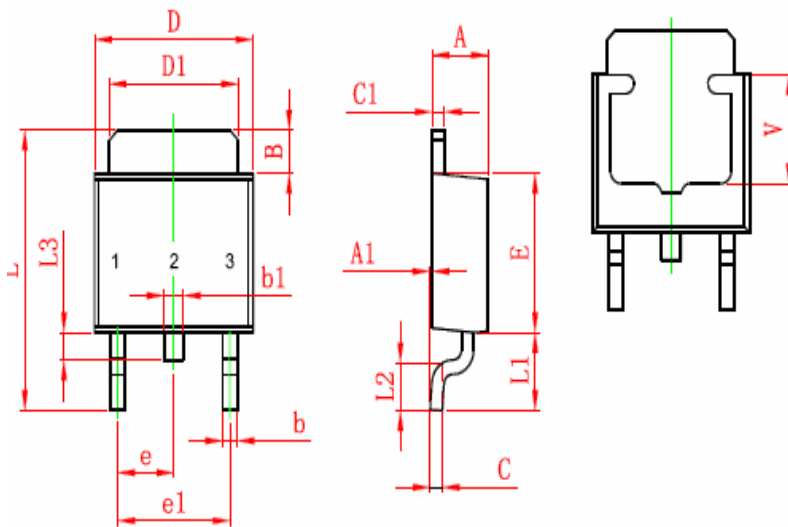
- Ultra-Fast Switching
- High Current Capability
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-0

### Mechanical Data:

- Case: Molded Plastic
- Terminals: Plated Leads, Solderable per MIL-STD-202, Method 208
- Weight: 0.39 grams (approx.)
- Marking: Type Number
- Mounting Position: Any

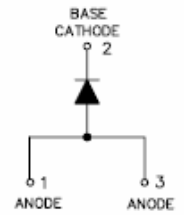
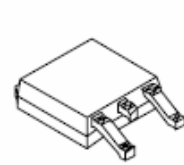
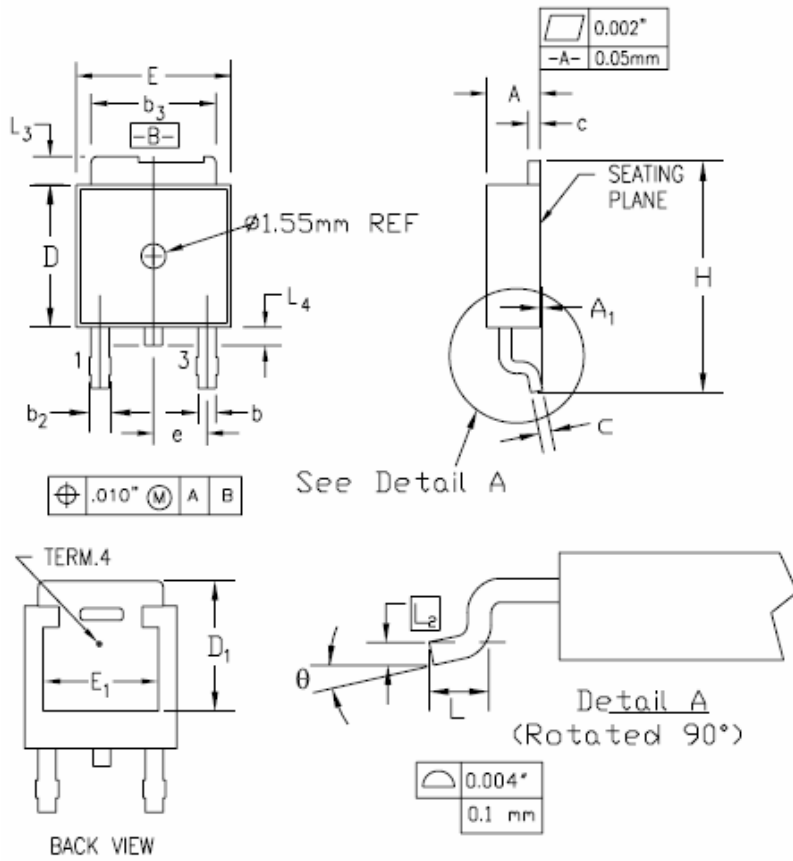


### Mechanical Dimensions: In mm/inch



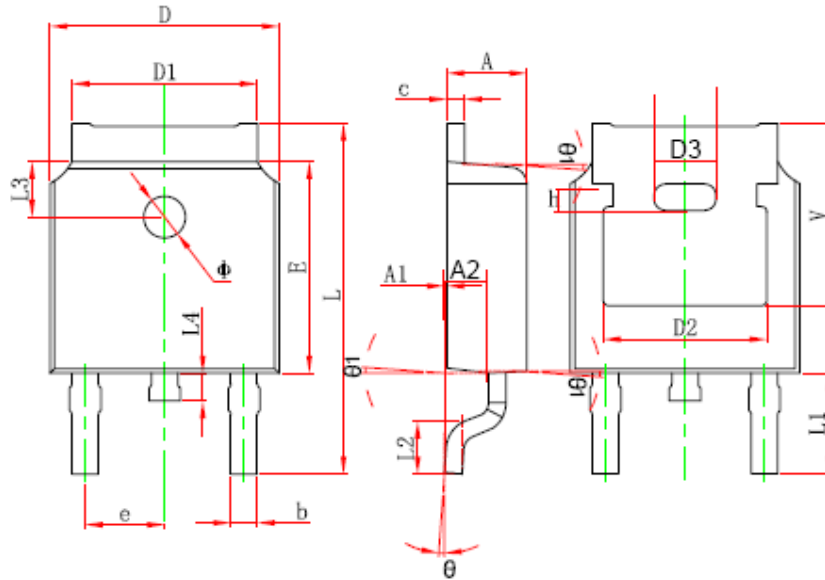
Symbol	Dimensions In Millimeters	
	Min.	Max.
A	2.200	2.400
A1	0.000	0.127
B	1.350	1.650
b	0.500	0.700
b1	0.700	0.900
c	0.430	0.580
c1	0.430	0.580
D	6.350	6.650
D1	5.200	5.400
E	5.400	5.700
e	2.300 TYP.	
e1	4.500	4.700
L	9.500	9.900
L1	2.550	2.900
L2	1.400	1.780
L3	0.600	0.900
V	3.800 REF.	

### OPTION 1

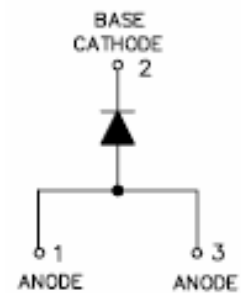


SYMBOL	INCHES		MILLIMETERS	
	MIN.	MAX.	MIN.	MAX.
A	0.086	0.094	2.19	2.38
A <sub>1</sub>	—	0.005	—	0.13
b	0.025	0.035	0.64	0.89
b <sub>2</sub>	0.033	0.045	0.84	1.14
b <sub>3</sub>	0.205	0.215	5.21	5.46
c	0.018	0.024	0.46	0.61
D	0.235	0.245	5.97	6.22
D <sub>1</sub>	0.205	—	5.21	—
E	0.250	0.265	6.35	6.73
E <sub>1</sub>	0.190	—	4.83	—
e	0.090 BSC		2.29 BSC	
H	0.380	0.410	9.65	10.41
L	0.055	0.070	1.40	1.78
L <sub>2</sub>	0.020 BSC		0.51 BSC	
L <sub>3</sub>	0.035	0.050	0.89	1.27
L <sub>4</sub>	0.025	0.040	0.64	1.01
$\theta$	0°	8°	0°	8°

**OPTION 2**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	2.200	2.380	0.087	0.094
A1	0.000	0.100	0.000	0.004
b	0.710	0.810	0.028	0.032
c	0.460	0.560	0.018	0.022
D	6.500	6.700	0.256	0.264
D1	5.130	5.460	0.202	0.215
D2	4.830 REF.		0.190 REF.	
E	6.000	6.200	0.236	0.244
e	2.186	2.386	0.086	0.094
L	9.800	10.400	0.386	0.409
L1	2.900 REF.		0.114 REF.	
L2	1.400	1.700	0.055	0.067
L3	1.600 REF.		0.063 REF.	
L4	0.600	1.000	0.024	0.039
Φ	1.100	1.300	0.043	0.051
θ	0°	8°	0°	8°
A2	0.910	1.110	0.036	0.044
V	5.350 REF.		0.211 REF.	
D3	1.778REF.		0.070REF.	
h	0.762REF.		0.030REF.	
θ1	7°		7°	


**OPTION 3**
**DPAK**
**MARKING, MOLDING RESIN**

Marking for HD860: 1st row: HL, 2ed row: CCC YWW, 3rd row: HD860

Note : HL is the abbreviation of our company

CCC is chip size

Y is manufacture year code, WW is manufacture week code

Molding resin: Epoxy resin UL:94V-0

**Maximum Ratings and Electrical Characteristics** @ $T_A=25^\circ\text{C}$  unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristic	Symbol	MURD860	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	600	V
RMS Reverse Voltage	$V_{R(RMS)}$	420	V
Average Rectified Output Current (Note 1) @ $T_A=100^\circ\text{C}$	$I_o$	8.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	110	A
Forward Voltage (per element) @ $I_F = 8.0\text{A}, T_J=25^\circ\text{C}$	$V_{FM1}$	2.2	V
@ $I_F = 8.0\text{A}, T_J=100^\circ\text{C}$	$V_{FM2}$	2.0	V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	$I_{RM}$	5.0 50	$\mu\text{A}$
Maximum Reverse Recovery Time (Note 1)	$T_{rr}$	35	ns
Max. Voltage Rate of Change	$dv/dt$	10,000	$\text{V}/\mu\text{s}$
Typical Thermal Resistance Junction to Ambient (Note 3)	$R_{\theta JA}$	25	K/W
Storage Temperature Range	$T_{STG}, T_J$	-55 to +150	$^\circ\text{C}$
Case Style	DPAK		

- Note:**
1. Reverse Recovery Test Conditions:  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $I_{RR}=0.25\text{A}$
  2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
  3. Mount on Cu-Pad Size 16mm×16mm on P.C.B.

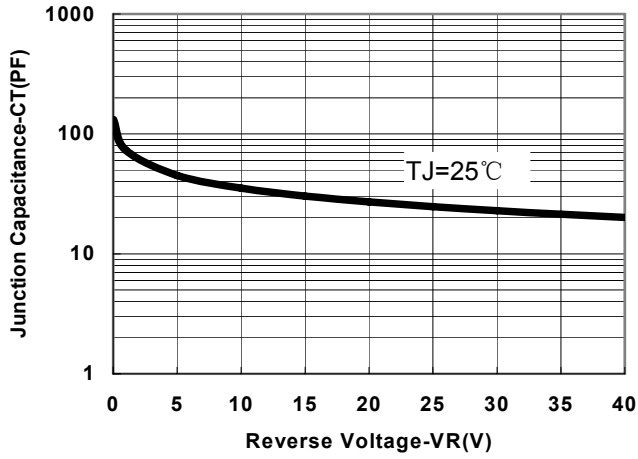


Fig.1-Typical Junction Capacitance

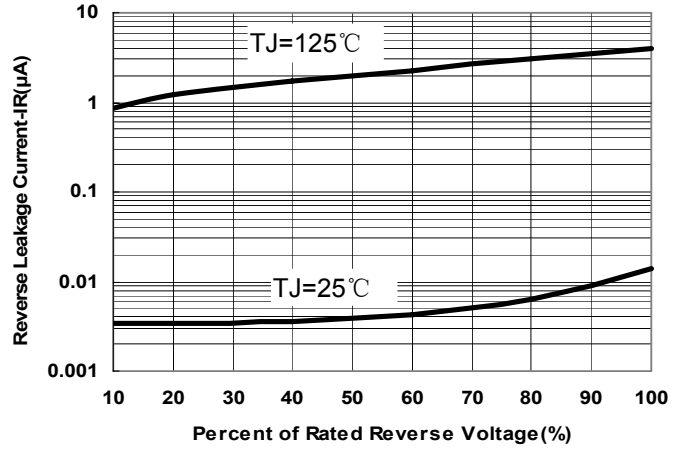


Fig.2-Typical Reverse Characteristics

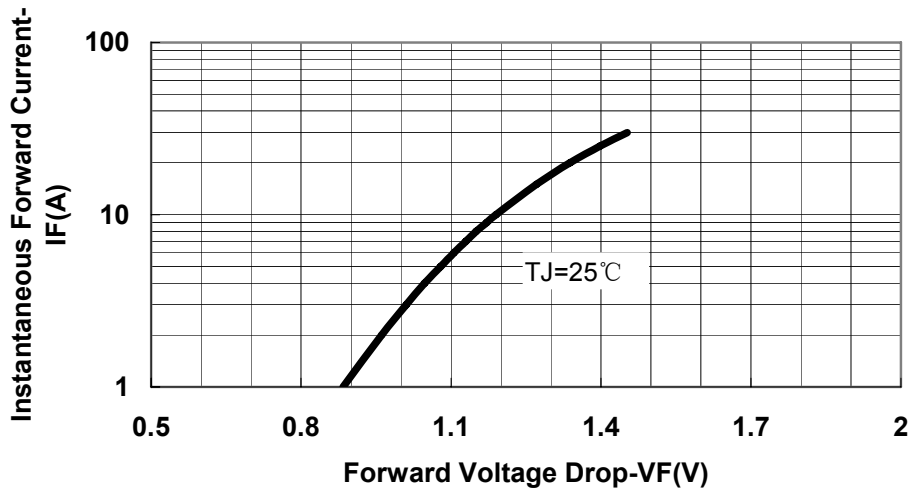


Fig.3-Typical Forward Voltage Drop Characteristics